

**UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA – OAKLAND**

Larry Golden, *Pro Se* Plaintiff  
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LARRY GOLDEN,

Plaintiff,

V.

GOOGLE LLC

Defendants.

CASE NO: 4:22-cv-05246-HSG

**JURY TRIAL DEMANDED**

(Direct Patent Infringement),  
(Induced and Contributory Patent  
Infringement), (Joint Infringement,  
(Willful Infringement)

**PLAINTIFF'S AMENDED COMPLAINT  
FOR PATENT INFRINGEMENT**

**FILED**

Aug 22 2023

Mark B. Busby  
CLERK, U.S. DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
OAKLAND

August 21, 2023

Pursuant to the Court Order filed on 08/10/23 Dkt. 41 in *Larry Golden v. Google LLC*, Case No. 4:22-cv-05246-HSG, Plaintiff is submitting this amended complaint against Google LLC for alleged direct infringement, induced and contributory infringement, joint infringement, and willful infringement of Plaintiff's United States Patent Nos. 10,984,619 ('619 Patent), 10,163,287 ('287 Patent), 9,589,439 ('439 Patent), and 9,096,189 ('189 Patent).

This amended complaint is necessary because after the Federal Circuit's order on 09/08/2022, in *Larry Golden v. Google LLC*; Case No. 22-1267, to "VACATE AND REMAND" the relevant Case No: 22-1267 Document 15; back to the District Court "to be filed and request service of process", Google has discontinued the making, offering for sell, and selling the Google Pixel 5 Smartphone; discontinued the use of Qualcomm's Snapdragon chipset, thereby eliminating Plaintiff's "joint infringement" claim; and discontinued offering for sell, and selling, the ATAK-Military on Google Play, to avoid liability for the actions brought against them.

This is an action of patent infringement in which plaintiff, Larry Golden ("Golden", "Plaintiff" or "Patent Owner"), hereby asserts the following claims for patent infringement of United States Patent Nos. 10,984,619 ('619 Patent), 10,163,287 ('287 Patent), 9,589,439 ('439 Patent), and 9,096,189 ('189 Patent) ("patents-in-suit"), against Defendant GOOGLE LLC ("Google" or "Defendant"), and alleges as follows:

Upon information and belief, Plaintiff alleges the patents-in-suit, that were issued with the presumption of validity, under 35 U.S. Code § 282 – "Presumption of validity; (a) In General", is Plaintiff's evidence that Plaintiff is the inventor of the Communicating, Monitoring, Detecting, and Controlling (CMDC) device(s) i.e., smartphones, laptops, tablets, etc.

Upon information and belief, Plaintiff alleges that the defendant Google, has in the past and continues to do so, make, use, offer to sell, or sell the Google Pixel 6a, 7, 7a, 7pro, and fold

smartphones, that Plaintiff believes infringes at least one of the claims in the patents-in-suit under 35 U.S.C. § 271(a), “anyone who makes, uses, offers to sell, or sells any patented invention domestically, or imports a patented invention into the United States during the term of the patent, is infringing the patent.”

Upon information and belief, Plaintiff alleges that the defendant Google, has induced infringement, thereby causing direct infringement with its Android Open-Source Operating System under 35 U.S.C. § 271(b). Plaintiff alleges Google actively encouraged the DoD/DTRA and Draper Laboratory Inc.’s infringement, knowing that the acts they induced constituted patent infringement, and their encouraging acts actually **resulted** in direct patent infringement.

In *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, the Federal Circuit considered whether proof of induced infringement requires proof that the encouragement of infringement was successfully communicated to the direct infringer and actually **resulted** in direct infringement. However, Fairchild claimed there was no evidence that it encouraged its accused chips to be incorporated into products ... with the specific intent to induce infringement.

The court disagreed, noting that Fairchild was involved in activities related to the use of its products ... Fairfield [Google] designed its products [same as Google Android Open-Source Operating System] to meet certain [] standards, provided demonstration boards containing the infringing chips [open-source platform] to customers and potential customers in the United States, and maintained a technical support center in the United States that provided support to customers based in the United States.” Plaintiff must prove the inducement **resulted** in direct infringement, not that the inducement was of a product that already directly infringes.

Similarly, under 35 U.S.C. § 271(c), “anyone who offers to sell, sells, or imports a material component of something that is patented, knowing that the component was especially

made for use in an infringement and is not a commodity suitable for a substantial non-infringing use, is also liable as a contributory infringer”. Plaintiff is alleging the defendant Google, has in the past and continues to *contribute* the Google Tensor i.e., Central Processing Unit (CPU), Processor, System-on-a-Chip (SoC), Chipset; a material component of Plaintiff’s patented Communicating, Monitoring, Detecting, and Controlling (CMDC) device, with knowledge that the Google Tensor Chipset is especially made for use in an infringement and is not a commodity suitable for a substantial non-infringing use.

Upon information and belief, Plaintiff alleges that the defendant Google is liable for “joint infringement”. In United States patent law, joint infringement is a form of patent infringement liability that occurs when multiple actors [Google LLC and Draper Laboratory Inc.] are involved in carrying out the claimed infringement of a patent and no single accused infringer has performed all of the steps of the method. In a 2015 decision of the United States Court of Appeals for the Federal Circuit, *Akamai Techs., Inc. v. Limelight Networks, Inc.*

Upon information and belief, Plaintiff alleges that the defendant Google is liable under the doctrine of willful blindness. Willful Blindness applies when Google seeks to avoid civil liability for the wrongful acts by intentionally keeping itself unaware of facts that would render Google liable or implicated. In the Eastern District of Texas, the Chief District Judge Rodney Gilstrap issued an opinion in the case (*Motiva Patents LLC v. HTC Corporation*) in which he wrote, “A well-pled claim for willful blindness is sufficient to state a claim for willful infringement.”

## THE PARTIES

1. Plaintiff Larry Golden is a citizen of South Carolina and has a principal place of business and residence at 740 Woodruff Road, #1102, Greenville, S.C. 29607.

2. On information and belief, Google is incorporated in the State of Delaware with a principal place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043 and does business in this judicial district by, among other things, committing jointly, directly, and/or indirectly the tort of literal patent infringement or infringement under the “doctrine of equivalents” giving rise to this complaint. Google may be served at its principal place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043.

3. Google LLC is one of the largest technology companies in the world and conducts product sales, and online search operations in the District of South Carolina. Google LLC directly, jointly, and/or indirectly distributes, markets, offers to sell, sells, and/or imports the infringing Google Pixel Series of smartphones, Google Tensor CPU, and Google Android Operating Systems.

### **STANDARD FOR REVIEW**

4. Plaintiff has attached a copy of the asserted patents as **Exhibits I-L**. The attached patents satisfy the requirement of “enough factual allegations. For example, in *Incom Corp. v. Walt Disney Co.*, No. 2:15-cv-03011-PSG-MRW, Dkt. 39, at \*4 (C.D. Cal. Feb. 4, 2016) the Central District of California declined to dismiss a complaint that attached the asserted patent, identified the accused products by name, and generally compared the technology disclosed in the patents to the accused products.

### **JURISDICTION AND VENUE**

5. This is a civil action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1332(a) and 1338(a).

6. On May 22, 2017, the U.S. Supreme Court narrowed the scope of proper venue for patent infringement actions for domestic corporations. *See TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, No. 16-341 (May 22, 2017). The *TC Heartland* decision reverses the approach to venue previously adopted by the U.S. Court of Appeals for the Federal Circuit, which had held for 27 years that a domestic corporation can be sued for patent infringement anywhere that corporation was subject to personal jurisdiction.

7. The special venue statute for patent infringement actions, 28 U.S.C. § 1400(b), has two provisions permitting venue: “[1] where the defendant resides, or [2] where the defendant has committed acts of infringement and has a regular and established place of business.”

8. Since the enactment of that statute, the Supreme Court consistently has interpreted Section 1400(b)’s first provision of proper venue—“where the defendant resides”. *E.g.*, *Fourco Glass Co. v. Transmirra Prods. Corp.*, 353 U.S. 222, 226 (1957). As a result, a domestic corporation may now be sued for patent infringement only in its state of incorporation or where it has committed acts of infringement and has a regular and established place of business.

## **THE U.S. DISTRICT COURT FOR THE DISTRICT OF NORTHERN CALIFORNIA IS BOUND BY THE DECISIONS OF THE U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT**

### ***Vertical Stare Decisis***

9. The United States Court of Appeals for the Federal Circuit is a federal court that has special importance in patent law. The Federal Circuit does not have jurisdiction over a particular region. Instead, it has jurisdiction over all appeals in cases that “arise under” the

patent laws. The Federal Circuit’s jurisdiction over appeals in patent cases is exclusive. Other circuit courts cannot review decisions in those cases.

10. Congress created the Federal Circuit in 1982 to be a court with specialized expertise in patent law. In giving it exclusive jurisdiction over patent cases, Congress aimed to ensure that the interpretation of the patent laws, and applicable legal precedent, would be uniform throughout the nation, and not vary among regional circuits.

11. Consistent with that, the Federal Circuit has developed a large body of precedent governing patent cases: how to interpret patent claims, how infringement must be proved, how invalidity must be established, and how damages must be calculated. Successful patent litigation in the district courts requires diligently the following of the Federal Circuit’s pronouncements on those issues.

12. Vertical stare decisis binds lower courts to follow strictly the decisions of higher courts within the same jurisdiction (e.g., the Northern District of California Court must follow the decisions of the U.S. Court of Appeals for the Federal Circuit). The Supreme Court defines vertical stare decisis as the doctrine, “a lower court must strictly follow the decision(s) handed down by a higher court within the same jurisdiction”. **(Exhibit A)**

13. A court engages in vertical stare decisis when it applies precedent from a higher court. For example, if the Northern District of California Court adhered to a previous ruling from the United States Court of Appeals for the Federal Circuit, in *Larry Golden v. Google LLC*; Case No. 22-1267, that would be vertical stare decisis.

14. The Federal Circuit on 09/08/2022, in *Larry Golden v. Google LLC*; Case No. 22-1267 — “VACATED AND REMANDED” the relevant Case No: 22-1267 Document 15; back to the District Court “to be filed and request service of process”. The Federal Circuit determined

the complaint, “includes a detailed claim chart mapping features of an accused product, the Google Pixel 5 Smartphone, to independent claims from U.S. Patent Nos. 10,163,287, 9,589,439, and 9,069,189” ... “in a relatively straightforward manner” ... and that the [Circuit] “express no opinion as to the adequacy of the complaint or claim chart except that it is not facially frivolous.”

In a Three-Judge Panel DISCUSSION: “Under the pleading standards set forth in *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007), and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009), a court must dismiss a complaint if it fails to allege “enough facts to state a claim to relief that is plausible on its face.” *Twombly*, 550 U.S. at 570 ... [T]his standard “requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do.” *Id.* at 555 (citation omitted). A plaintiff must allege facts that give rise to “more than a sheer possibility that a defendant has acted unlawfully.” *Iqbal*, 556 U.S. at 678 (citation omitted) ... this court has explained that a plaintiff ... must plead ““enough fact[s] to raise a reasonable expectation that discovery will reveal’ that the defendant is liable for the misconduct alleged.”

“Mr. Golden’s complaint includes a detailed claim chart mapping features of an accused product, the Google Pixel 5 Smartphone, to independent claims from U.S. Patent Nos. 10,163,287, 9,589,439, and 9,069,189 ... It [claim chart] attempts [] to map claim limitations to infringing product features, and it does so in a relatively straightforward manner ... [W]e conclude that the district court’s decision in the Google case is not correct with respect to at least the three claims mapped out in the claim chart. Mr. Golden has made efforts to identify exactly how the accused products meet the limitations of his claims in this chart....”

15. Vertical Stare Decisis bars Google from challenging whether Plaintiff has pled enough facts and provided sufficient notice to the Defendant Google. The Federal Circuit’s ruling: “the complaint includes a detailed claim chart mapping features of an accused product, the Google Pixel 5 Smartphone, to independent claims from U.S. Patent Nos. 10,163,287, 9,589,439, and 9,069,189” ... ‘in a relatively straightforward manner’”.



16. Vertical stare decisis, or vertical precedent, is the obligation of the Northern District of California Court to follow the decisions of the United States Court of Appeals for the Federal Circuit that falls within the hierarchical structure. Vertical stare decisis and precedent, are a matter of hard law, not a matter of policy.

17. Something analogous happens with vertical stare decisis: it is not hard law because it sanctions departure; rather it is because of its hard nature that vertical stare decisis brings with it, or needs, a sanction against non-compliance.

18. So, with vertical stare decisis it is true that in the absence of compliance by the Northern District of California Court, the Federal Circuit will likely overturn the Northern District of California Court's decision. This works as a kind of sanction against the non-complying court. Vertical stare decisis is, indeed, afforded binding weight.

19. The alleged facts were included in the original complaint because Plaintiff knew and understood he "must allege facts that give rise to "more than a sheer possibility that the Defendant has acted unlawfully." *Iqbal*, 556 U.S. at 678 (citation omitted).

20. On appeal in *Larry Golden v. Google LLC*; Case No. 22-1267, the Federal Circuit determined Plaintiff has "pled enough fact[s] to raise a reasonable expectation that discovery will reveal that the Defendant is liable for the misconduct alleged."

21. Therefore, according to the doctrine of "*Vertical Stare Decisis*" Google is barred from challenging, and this Court is barred from relitigating the specifications of the Google Pixel 5 and the Android Team Awareness Kit (ATAK), that was decided as being nonfrivolous in U.S. Court of Appeals for the Federal Circuit:

22. The Federal Circuit has determined Golden has alleged "enough facts to state a claim to relief that is plausible on its face." *Twombly*, 550 U.S. at 570 ... pled "enough fact[s] to

raise a reasonable expectation that discovery will reveal’ that the defendant is liable for the misconduct alleged”. The decision cannot be overturned by the lower Northern District of California Court.

23. In the Federal Circuit’s language, “a detailed claim chart mapping features of an accused product, the Google Pixel 5 Smartphone, to independent claims from U.S. Patent Nos. 10,163,287, 9,589,439, and 9,069,189”, indicates a determination has been made on direct infringement, either literally or under the doctrine of equivalents.

### ***“Doctrine of Equivalents”***

24. When the Federal Circuit states, “‘express no opinion as to the adequacy [the state or quality of being adequate] of the complaint or claim chart except that it is not facially frivolous”, means the Circuit is not expressing an opinion on whether the direct infringement is literal direct infringement or direct infringement under the doctrine of equivalents.

25. “Literal infringement” means that each and every element recited in a claim has identical correspondence in the allegedly infringing device or process. “Under the doctrine of equivalents, a product or process that does not literally infringe . . . the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1315 (Fed. Cir. 1998)

26. In *Graver Tank & Mfg. Co. v. Linde Air Prods., Inc.*, the U.S. Supreme Court held that Plaintiff, the patent owner, may invoke the doctrine of equivalents to proceed against Google if the Google Pixel smartphones performs substantially the same function in substantially the same way to obtain the same result.

27. The Doctrine of Equivalents was established in the United States with the case of *Winans v. Denmead*, which dealt with changing a part of the construction of the patented invention to avoid infringement. Setting a precedent, the court held that infringement may be claimed even if the same literal legal patent language was not used. A mere change in form while retaining the rest from the patented claim is still considered infringement.

28. The doctrine is explained in the words of Judge Curtis for the case as, “the patentee, having described his invention, and shown its principles, and claimed it in that form which most perfectly embodies it, is, in contemplation of law, *deemed to claim every form in which his invention may be copied*, **(Exhibit B)** unless he manifests an intention to disclaim some of those forms.”

29. Under this doctrine, Plaintiff can argue infringement even if each and every claim element of the patent is not completely or identically present in the infringed invention. The purpose of the doctrine is to ensure that Google does not benefit from minor or insubstantial changes that may escape literal infringement.

30. If the accused Google Pixel products or process does not literally infringe Plaintiff’s patented invention, the accused Google Pixel products or process may be found to infringe under the doctrine of equivalents. The essential objective inquiry is: “Does the accused Google Pixel products or process contain elements identical or equivalent to each claimed element of the patented invention?” *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 41 USPQ2d 1865, 1875 (1997).

31. In determining equivalence, “an analysis of the role played by each element in the context of the specific patent claim will thus inform the inquiry as to whether a substitute

element matches the function, way, and result of the claimed element, or whether the substitute plays a role substantially different from the claimed element.” **(Exhibit B)**

32. For an infringement analysis & litigation, claim charts help confirm or disconfirm that each and every limitation of the claim is present in a product, service, or standard. **(Exhibit B)** An Evidence-of-Use (EoU) or Infringement Chart shows how a product or process accused of infringement contains each claim element to satisfy the ‘all elements test’ for infringement.

## DOUBLE STANDARD

33. A double standard is defined as a rule or principle which is unfairly applied in different ways to different people or groups, and is a concept that can still be heavily applied to the history of the United States. The topics of racism, discrimination, and prejudice make many individuals uncomfortable, furious, or indifferent. Since humans began developing social classes, racial division has been a key factor in how societies organize - however, it’s important to note that race is simply a social construction. Clark<sup>0</sup>, Anthony. “*Double standards are stunting America’s growth.*” UWIRE Text, 8 May 2020, p. 1. Gale Academic OneFile, [link.gale.com/apps/doc/A623469076/AONE?u=anon~18e9207f&sid=googleScholar&xid=3bcd7ca9](https://link.gale.com/apps/doc/A623469076/AONE?u=anon~18e9207f&sid=googleScholar&xid=3bcd7ca9). Accessed 17 Aug. 2023.

34. Qualcomm announced it was developing the Scorpion central processing unit (CPU) for mobile devices in November 2005. This was followed by the first shipments of the Snapdragon system-on-chip product, which includes a CPU, camera support and other software and semiconductors, in November 2007.

35. Qualcomm is the world’s biggest provider of mobile chips, and it created technology that’s essential for connecting phones to cellular networks. The company derives a

significant portion of its revenue from licensing those inventions to hundreds of device makers, with the fee based on the value of the phone, not the components.

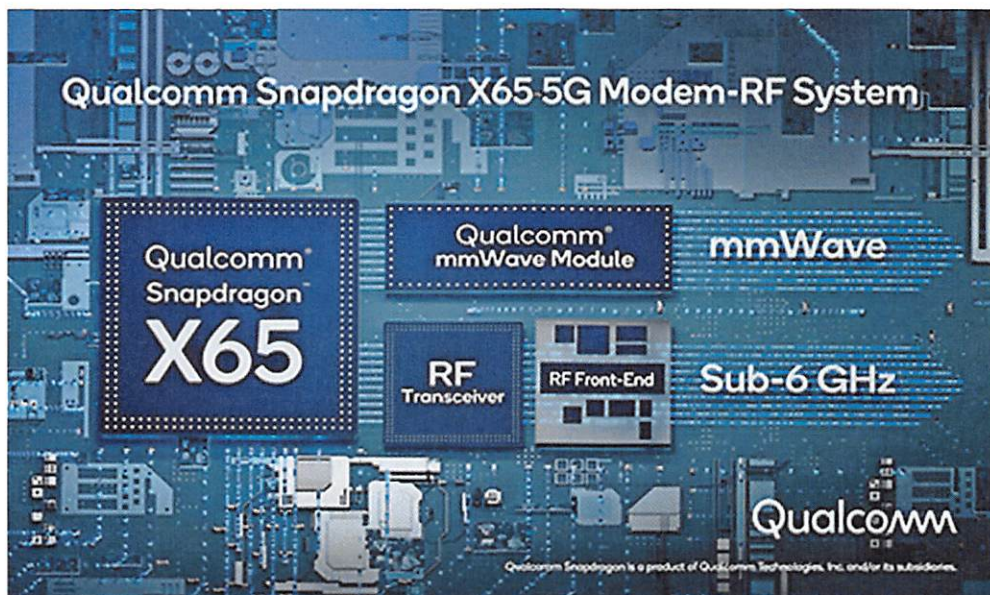
36. Because Qualcomm owns patents related to 3G, 4G and 5G networking technology, as well as other features like *software*, all handset makers [i.e., Google] building a device that connects to cellular networks have to pay it a licensing fee, even if they don't use Qualcomm's [*software*] chips. <https://www.cnet.com/tech/mobile/qualcomm-settles-huawei-patent-spat-warns-of-5g-flagship-phone-delay-likely-the-iphone/>

37. Qualcomm receives a licensing fee on the price of handsets (i.e., smartphones) that Plaintiff, an African American inventor, owns the patent rights for. Qualcomm receives the royalty fee even if Google don't use Qualcomm's *software* chips. Google's Pixel devices are "capable of" being modified by Qualcomm's Snapdragon X65 5G Modem-RF *software* to operate in an infringing manner is not sufficient, by itself, to support a finding of infringement." *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1330 (Fed. Cir. 2001).

38. The Federal Circuit has applied this principle in cases involving the modification of hardware through the addition of *software*. See *Nazomi Commc'ns, Inc. v. Nokia Corp.*, 739 F.3d 1339, 1346 (Fed. Cir. 2014) (finding that the defendants' products "do not infringe without modification—the modification of installing the required software").

39. Based on the Federal Circuit's principles, Qualcomm should not be receiving royalties because the infringement only occurs with the *software* modification of the smartphone. Qualcomm is especially privileged because Qualcomm collects royalties on the price of the smartphone, even when the *software* modification is made by someone other than Qualcomm. Following is a comparison of Qualcomm's Snapdragon X65 5G Modem-RF [*software*] System and Ind. Claim 1 of Plaintiff's '189 patent asserted in this case.





**Patent #: 9,096,189; Independent Claim 1 [Asserted in Complaint]**

A communication device of at least one of a cell phone, *a smart phone*, a desktop, a handheld, a PDA, a laptop, or a computer terminal for monitoring products, interconnected to a product for communication therebetween, *comprising*:

at least one of a central processing unit (CPU) for executing and carrying out the instructions of a computer program, a network processor which is specifically targeted at the networking application domain, or *a front-end processor* for communication between a host computer and other devices;

whereupon the communication device, is *interconnected to a product equipped to receive signals from or send signals to* lock or unlock doors, activate or deactivate security systems, activate or deactivate multi-sensor detection systems, or to activate or deactivate cell phone detection systems

wherein at least one satellite connection, Bluetooth connection, WiFi connection, internet connection, *radio frequency (RF) connection*, cellular connection, broadband connection... *short range radio frequency (RF) connection* is capable of signal communication with the transmitter and the receiver of the communication device and *transceivers* of the products;

40. When Plaintiff, an African American inventor, attempts to prove infringement in this case, Plaintiff case is dismissed because “Google contends that “Mr. Golden thus alleges not that Google sells infringing Pixel devices, but that someone else could modify Google’s Pixel devices, by adding non-Google software, to make them allegedly infringing’.”

41. Upon information and belief, Google pays Qualcomm a royalty fee on the price of each smartphone sold if Google uses Qualcomm’s software, or chose not to use Qualcomm’s software; Qualcomm’s infringement theory of “software modification” still stands.

42. Upon information and belief, a double standard is applied in this case because Plaintiff is an African American inventor.

**GOOGLE, NOT PLAINTIFF, IS RESPONSIBLE FOR THE  
MODIFICATIONS OF GOOGLE’S PRODUCTS TO OPERATE IN AN  
INFRINGING MANNER**

43. Many inventions are not entirely new but instead build upon previous inventions and provide meaningful improvements. This might involve adding an element to an existing invention, putting an existing invention to a new and unexpected use, or invigorating an old product with a new form of technology. For example, adding a new technology to an old product occurred when companies started using *microprocessors to control devices* that had been controlled by analog circuitry. These companies succeeded in obtaining patents for the improved devices, which covered the differences between the original version and the new version.

44. There are two main types of improvement patents, which are known as addition inventions and substitution inventions. An addition invention adds a component that previously was not present in a product or process. A substitution invention replaces a certain product or process with a new product or process that is more efficient in accomplishing the same purpose.

45. Below, are a list of modifications Google has made to the cell phone that's covered by Plaintiff's patents. **(Exhibit C)** The individual inventions describe each patented limitation that forms Plaintiff's Communicating, Monitoring, Detecting, and Controlling (CMDC) device. [i.e., Google's modified Pixel 6a, 7, 7a, 7 Pro & Fold smartphones]

46. Google's open-source architecture allow scientist, engineers, developers, manufacturers, etc. to designed products, devices, and apparatuses to be integrated with and configured to operate and function with the CMDC host device:

- I. Communicating, Monitoring, Detecting, and Controlling (CMDC) Device (i.e., smartphone) – Claim 23 of the '439 Patent
- II. Central Processing Units for CMDC Device – Claim 5 of the '287 Patent
- III. Camera CBR Sensor(s) for CMDC Device – Claim 4 of the '189 Patent
- IV. Smartwatch CBR Detector for CMDC Device – Claim 19 of the '439 Patent
- V. Embedded CBRN Sensors for CMDC Device – Claim 16 of the '439 Patent
- VI. Interchangeable Sensors for CMDC Device – Claim 20 of the '439 Patent
- VII. NFC CBR Tag for CMDC Device – Claim 21 of the '439 Patent
- VIII. Remote/Electrical Lock for CMDC Device – Claim 125 of the '990 Patent
- IX. Pre-Programmed Lock for CMDC Device – Claim 1 of the '287 Patent
- X. Fingerprint / Face Recognition for CMDC Device – Claim 1 of the '619 Patent
- XI. Stall, Stop, Slowdown for CMDC Device – Claim 11 of the '891 Patent
- XII. Vehicle Monitoring with CMDC Device – Claim 44 of the '891 Patent
- XIII. Connect Vehicle with CMDC Device – Claim 4 of the '287 Patent
- XIV. Internet-of-Things (IoTs) with CMDC Device – Claim 11 of the '619 Patent



47. Google’s “capable of”, “possible to alter”, “modification of hardware”, “do not infringe without modification”, theories are without merit because Plaintiff’s patent specifications and patent claims cover communication methods [software] for the integration of a detection means that is either in, on, upon, or adjacent to the Google smartphone.

48. According to Google’s theories, tens of thousands of issued patents are considered indefinite or unenforceable because hardware is being modified with the use of Bluetooth software, radio frequency (RF) software, Wi-Fi software, wireless cellular modem software, GPS software, software for the internet-of-things, software for controlling vehicle components, software for locking and unlocking locks, software for controlling drones, etc.; the list goes on.

49. Example: Plaintiff owns three (3) of the four (4) essential components for Google’s smartphone sensing device. The host device smartphone; the central processing unit (CPU), and the smartphones camera used for CBR sensing. The only component Plaintiff have not directly written a patent claim on, but is covered in Plaintiff’s patent specifications as a “transceiver” is the operating system.

50. The ATAK-CBRN plugins software is built on Google’s Android Open-Source Operating System (OS). The OS is responsible for managing both software and hardware components. All computer programs and apps require an operating system to do any work. Yet the OS is not the central processing unit (CPU). Plaintiff’s patented CPU serves as the smartphones brain, and the OS serves as the brain’s conscience.

“Independent claims 4, 5, & 6 of Plaintiff’s Patent No. 10163287 (‘287 patent): at least one of ... *a transceiver in communication with the at least one CPU* configured to send signals to ... detect at least one of a chemical biological, radiological, or explosive agent such that the communication device is capable of communicating, monitoring, detecting, and controlling.”

## GOOGLE CAUSED THE INFRINGEMENT OF PLAINTIFF'S PATENTS

51. Android is an open-source operating system for mobile devices and a corresponding open-source project led by Google. The Android Open-Source Project (AOSP) repository offer the information and source code needed to create custom variants (i.e., ATAK is built on the Android operating system) of the Android OS, port devices and accessories to the Android platform, and ensure devices meet the compatibility requirements that keep the Android ecosystem a healthy and stable environment for millions of users.

52. Google oversees the development of the core Android open-source platform and works to create robust developer and user communities. For the most part, the Android source code is licensed under the permissive Apache License 2.0. Google chose the Apache 2.0 license because it encourages widespread Android software adoption. Google has committed the professional engineering resources necessary to ensure that Android is a fully competitive *software* platform.

53. Each platform version of Android (such as 1.5 or 8.1) has a corresponding branch in the open-source tree. The most recent branch is considered the current stable branch version. This is the branch that manufacturers port to their devices.

54. The Google Android *software* is first built into a system image for a device and put through various forms of certification, including government regulatory certification for the regions the phones will be deployed.

55. When the release is approved by the regulators and operators, the manufacturer begins mass producing devices, and Google begin releasing the source code. Simultaneous to mass production, the Google team kicks off several efforts to prepare the open-source release, that include making final API changes and updating documentation to reflect any modifications

that were made during qualification testing. Google's legal team does a final sign-off to release the code into open source.

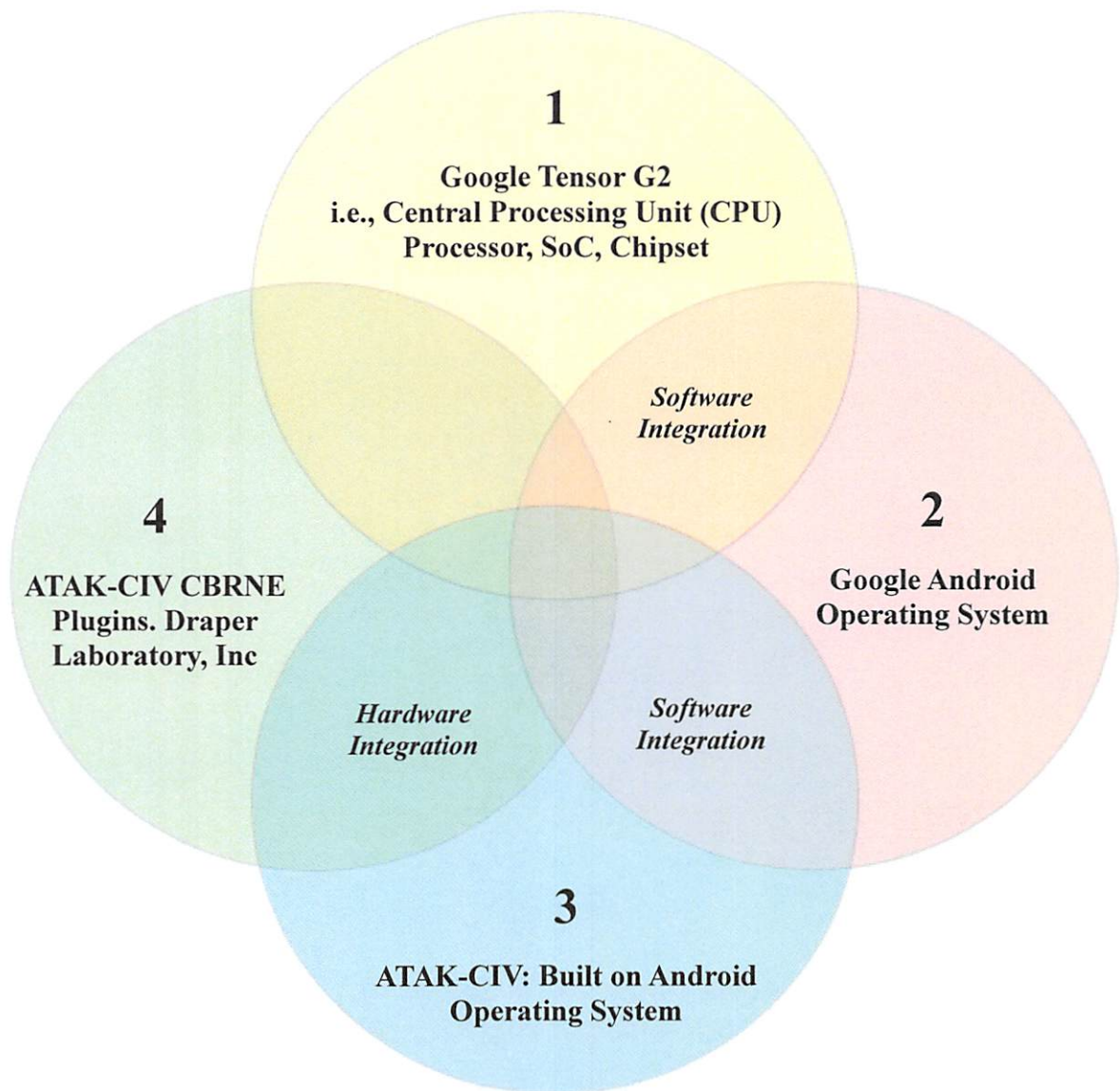
56. The Android Open-Source Project maintains Android software, and develops new versions. Because it's open source, this software can be used for any purpose. The function of the Android Compatibility Program is to define a baseline implementation of Android that is compatible with third-party apps [DoD/DTRA/ATAK apps] written by developers. Devices that are Android compatible are eligible to participate in the Android ecosystem.

57. Google APIs are mechanisms that enable two software components [Google Android operating system software and the ATAK software that is built on the Android operating system] to communicate with each other using a set of definitions and protocols.

58. API stands for Application Programming Interface. In the context of APIs, the word Application refers to any software with a distinct function. Interface can be thought of as a contract of service between two applications. This contract defines how the two communicate with each other using requests and responses.

59. *Android Team Awareness Kit*, ATAK (built on the Android operating system) is a digital application available to warfighters throughout the DoD. ATAK offers warfighters geospatial mapping for situational awareness during combat — on an end-user device such as a smartphone or a tablet. With DTRA's contribution, ATAK now includes chemical, biological, radiological, and nuclear (CBRN) plug-ins.

60. *Android Team Awareness Kit*, ATAK (built on the Android operating system) provides a single interface for viewing and controlling different CBRN-sensing technologies, whether that is a wearable smartwatch that measures a warfighter's vitals (e.g., heart rate) or a device mounted on a drone to detect chemical warfare agents.



61. The TAK suite of tools uses plugins, allowing users to design applications specific to their mission needs. For example, ATAК can connect to sensors, satellites, drones, and smartwatches, enabling integration of valuable data from operators and team members and the environment.

62. Draper Laboratory, Inc. designed a CBRN Plugin to enable users to integrate CBRN sensors into TAK, collect CBRN sensor data, display it on a map and livestream it across the TAK network to other users. CBRN plugins for ATAК, are operational in the field.

## **GOOGLE SELLS THE “SOFTWARE” THAT ENABLES THE INFRINGEMENT OF PLAINTIFF’S PATENTS**

### ***Google Play Apps for CBRNE Sensing and Detection — (Exhibit D & D1)***

63. **ATAK-CIV (CBRN):** “The Tactical Assault Kit is DoD nomenclature for the Team Awareness Kit (TAK) application: a mission planning, geospatial, Full Motion Video (FMV), and system administrator tool that reduces the operational footprint from a tactical laptop, to a commercial mobile device. The geospatial engine and communications component support Department of Defense (DoD) and commercial sector standards. Extensibility of the core platform is supported by the Software Development Kit (<https://tak.gov>), which enables any partner to develop mission-specific capability or contribute to the advancement of the baseline. Data can be pre-loaded into ATAK or downloaded from the network when available.”

[https://play.google.com/store/apps/details?id=com.atakmap.app.civ&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=com.atakmap.app.civ&hl=en_US&gl=US)

64. “CivTAK 4.0.7 has been released. This is the enterprise-quality, “F-35 of Geospatial Collaboration” official, [CBRN] plugin-capable release of CivTAK. You can get it here. It’s the most capable geospatial collaboration tool out there at any price.” T-Rex recommended that iPhone users go buy an Android to try it out it is so powerful.

<https://www.civtak.org/2020/06/25/civtak-4-0-7-has-been-released/>

65. **CBRNResponder [CBRN]:** “CBRNResponder provides free software tools for logging, transmitting, storing, analyzing, and presenting environmental radiological, chemical, and biological monitoring data. Data is stored in a secure cloud environment accessible only by the user. To register for an account and to obtain further information, please go to [www.cbrnresponder.net](http://www.cbrnresponder.net). The application has a Responder Tracking feature that allows a responder to track and share their location path with participants on an event.” Retrieved from:

[https://play.google.com/store/apps/details?id=com.chainbridgetech.cbrnresponder&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=com.chainbridgetech.cbrnresponder&hl=en_US&gl=US)

66. CBRNResponder is a cloud-based database that can be accessed on smartphones, tablets, specially designed instruments and via the web, allowing it to be employed at all levels of government during a response to a radiological or nuclear emergency. The CBRNResponder links to the CBRNResponder database and user interface including CBRNResponder App.

[https://www.nnss.gov/docs/docs\\_FRMAC/FAM%20Vol%201%20-%20Operations%20-%20FINAL%20May2023.pdf](https://www.nnss.gov/docs/docs_FRMAC/FAM%20Vol%201%20-%20Operations%20-%20FINAL%20May2023.pdf)

67. **Chemical Detectives [Chemical]:** “Determining the molecular structure of organic molecules experimentally can be a tricky challenge! Chemists do this by taking a number of different types measurements, and solving the puzzle a bit like solving a jigsaw puzzle. We use techniques such as: • microanalysis • mass spectrometry • infrared spectroscopy”

[https://play.google.com/store/apps/details?id=com.chemicaldetectives&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=com.chemicaldetectives&hl=en_US&gl=US)

68. **USAMRIID's Biodefense Tool [Biological]:** “The United States Army Medical Research Institute of Infectious Diseases (USAMRIID) is the Department of Defense’s lead laboratory for medical biological defense research; with a mission to provide leading edge medical capabilities to deter and defend against current and emerging biological threat agents. A key component of this mission is the training of military and civilian medical and public health professionals to become proficient in recognizing early warning signs that a biological attack has occurred, activating the appropriate agencies and personnel to investigate the event, treating casualties, and preventing spread of disease. This application distills key information presented in USAMRIID’s training and education courses on biological threat agents of concern and serves as a...” [https://play.google.com/store/apps/details?id=com.tradocmobile.bio&hl=en\\_IE&gl=US](https://play.google.com/store/apps/details?id=com.tradocmobile.bio&hl=en_IE&gl=US)



69. **GammaPix Lite-Gamma Rad Detect [Radiation]:** “Developed initially for several federal agencies, turns your phone into a detector of ionizing radiation. The GammaPix technology has been successfully tested at independent labs with calibrated sources. It was developed with support from the U.S. Department of Defense, the Domestic Nuclear Detection Office (U.S. Department of Homeland Security), and the Transportation Research Board (U.S. National Academy of Sciences). We were encouraged by them to bring this technology to the public. Worried about accidental exposure to radioactive material or acts of terrorism? The GammaPix App can provide timely warning of the...” [https://play.google.com/store/apps/details?id=com.ImageInsightInc.GammaPixLite&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=com.ImageInsightInc.GammaPixLite&hl=en_US&gl=US)

70. **Explosives Identification [Explosives]:** The Explosives Identification Guide Second Edition has been the guide of choice for multiple federal law enforcement agencies for over 10 years. This application was created so that First Responders from all disciplines have the key info they need in the palm of their hand should they come across an explosive device. In the current threat environment, the information in this application can save lives. [https://play.google.com/store/apps/details?id=com.edpreparedness.explosives.android&hl=en\\_NZ&gl=US](https://play.google.com/store/apps/details?id=com.edpreparedness.explosives.android&hl=en_NZ&gl=US)

71. **Hazardous material (HazMat):** A CBRNE mobile app is developed for a mobile device operating system (OS) such as Android... apps integrate with mobile devices’ GPS technology, built-in camera, WiFi... Android Apps available on Google Play for download are **FiRST**; **Navfree**; **ERG**; **REMM**; and, **HazMasterG3**. Software applications installed on mobile devices, such as smartphones and tablets, are useful to emergency responders during a HazMat/CBRNE incident. The transition to this new network will require modifications to existing communication devices, such as smartphones and tablets. <https://play.google.com/store/apps?hl=en>. **(Exhibit E)**

## PLAINTIFF'S TWO ELEMENTS REQUIRING CBRNE SENSING ARE SATISFIED WITH GOOGLE'S "BUILT IN, EMBEDDED" COMPONENTS

72. *“Inter Partes Review (IPR): Department of Homeland Security vs. Larry Golden;* Case No.: IPR2014-00454 (Patent RE43,990; Claims 11, 74, & 81); Final Written Decision entered on October 1, 2015. “In the ‘Decision to Institute’, we construed certain claim terms. Those constructions are reproduced in the chart below:

Claim Term	Construction
“built in, embedded” (claim 74)	“something is included within, incorporated into, disposed within, affixed to, connected to, or mounted to another device, such that it is an integral part of the device”
“communication device” (claim 81)	“monitoring equipment”

Dec. to Inst. 11-16

73. “No party challenges these constructions. Both of these terms were modified or removed in the amendment. To the extent that any of these constructions remain relevant after the amendment, we see no reason to modify them... [w]e further determined that no explicit construction was necessary for any other claim terms. Dec. to Inst. 10-11. Based on the record adduces during trial, we see no need to construe any other terms...”

74. “Beginning with the claim preamble amendment, the preamble of claim 11 originally read: “A communication device of at least one of *a cell phone, a smart phone, a desktop, a handheld, a PDA, a laptop, or a computer terminal at a monitoring site* for monitoring products for communication therebetween, comprising....” In claim 154, the language in italics has been eliminated and replaced with “the products grouped together by common features in the product grouping category of design similarity (e.g., computer terminal,



personal computer (PC)) ...” Patent Owner contends that this new language is consistent with words found in the disclosure of the ‘118 application. Mot. To Amend 4. Patent Owner further contends that this new language is broad enough to include the removed items, such as cell phones and smart phones, because those items are “species terms” that are “included in the genus ‘monitoring equipment’ and ‘communication device’ when the clause ‘products grouped together by common features in the product groupings category of design similarity’ is included.” *Id.*

75. Patent Owner argues that “[t]he specific devices removed, such as the cell phones and smart phones would be recognized by one of ordinary skill in the art as a type of communication device or monitoring equipment because cell phones and smartphones are devices that are capable of communication and are capable of receiving signals.” *Inter Partes Review (IPR): Department of Homeland Security vs. Larry Golden*; Case No.: IPR2014-00454 (Patent RE43,990; Claims 11, 74, & 81); Final Written Decision entered on October 1, 2015.

### Google’s “Built In, Embedded” CBRNE Components

**ATAK-CIV (CBRN):** “The Tactical Assault Kit is DoD nomenclature for the Team Awareness Kit (TAK) application: a mission planning, geospatial, Full Motion Video (FMV), and system administrator tool that reduces the operational footprint from a tactical laptop, to a commercial mobile device. Data can be pre-loaded into ATAK or downloaded from the network when available.” [https://play.google.com/store/apps/details?id=com.atakmap.app.civ&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=com.atakmap.app.civ&hl=en_US&gl=US)

Google’s “built-in, embedded” Android open-source operating system, enable the infringement of Plaintiff’s patents.



### Near-Field Communication (NFC)

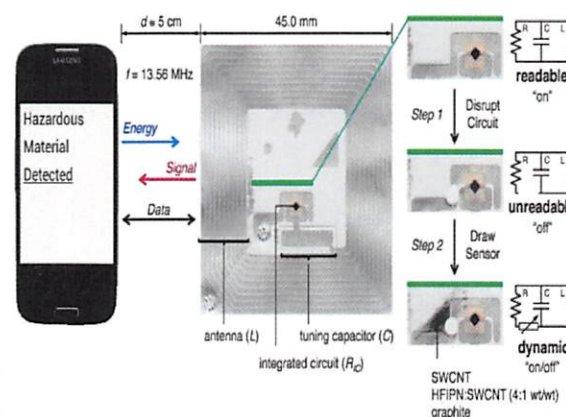
**Smartphone Sensor:** Nascent technology embedded in modern smartphones—near-field communication (NFC)—for wireless electronic, portable, non-line-of-sight selective detection of gas-phase chemicals (**Fig. 1**)

National Institutes of Health (NIH).

*“Wireless gas detection with a smartphone via rfnfc communication”* Published online 2014 Dec 8. doi: 10.1073/pnas.

1415403111 Retrieved from:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4280584/>

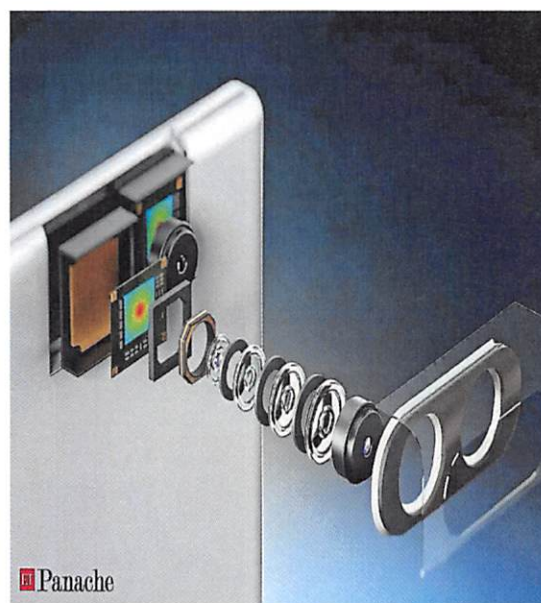


**Figure 1**

Conversion of an NFC tag into a CARD enables wireless rf detection of chemical analytes with a smartphone. NFC-enabled smartphones communicate with NFC tags by simultaneously energizing the NFC tag with an alternating magnetic field ( $f = 13.56$  MHz) through inductive coupling and transferring data by signal modulation.

**Camera Sensor:** Camera lens in cell phone with microfluidic lens functions as camera; uses microscope to focus on a chemical sensor. A *megapixel* camera captures the image from the array of nanopores uses fluid rather than bulky moving parts. The sensors contained in one array is determined by the *pixel* resolution phone camera. *Megapixel* resolution in cell phone cameras; probe a million different spots on the sensor simultaneously. *Tiny sensors tucked into cell phones could map airborne toxins in real time.* Source: [https://www.understanding nano.com/cell-phone-sensors-toxins.html](https://www.understandingnano.com/cell-phone-sensors-toxins.html)

Hyperspectral imaging scans for light frequencies that humans can't see in order to identify the unique chemical signatures of different substances. They say their device, which can be mass produced, is compatible with all standard smartphone cameras. *These New Smartphone Cameras Could Tell You What an Object Is Made of* <https://www.sciencealert.com/new-smartphone-cameras->

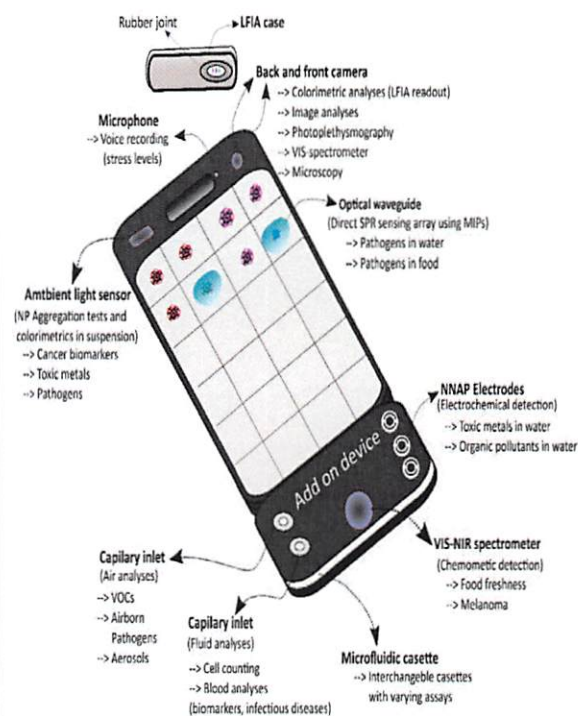


Smartphones provide hardware and software capability which can be incorporated with [CBR] sensors, enabling accurate on-site portable sensing. The camera, screen, and LED flashlight of the smartphone can be employed as components of the sensor. <https://link.springer.com/article/10.1007/s11468-022-01672-1>



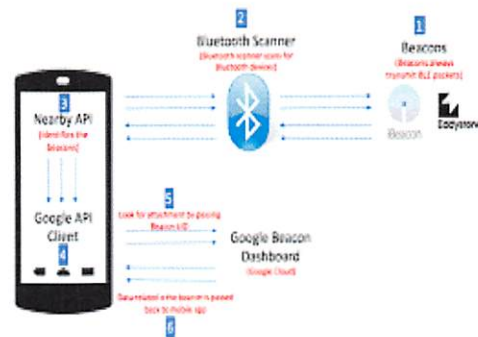
### Smartphone Biosensors:

1. Ambient light sensor: Cancer biomarkers; Toxic metals; Pathogens
2. Capillary inlet: (Air analysis). Airborne Pathogens; Aerosols
3. Capillary inlet: (Fluid analysis). Blood analysis; Biomarkers
4. Microfluidic cassette: Interchangeable cassettes with varying assays
5. VIS-NIR spectrometer: Food freshness; Melanoma
6. NNAP Electrodes: Toxic metals and Organic pollutants in water
7. Optical Waveguide: Pathogens in water and food
8. Back and front camera: Colorimetric analysis; Image analysis
9. Microphone: Voice recording stress levels



### Google Beacon: Bluetooth; GPS; Wi-Fi

Google Android smart phones and Wi-Fi/Bluetooth beacons as detectors and sources. Google smart phone sensors (GPS, Wi-Fi, Bluetooth) and beacon signals to calculate distance between detector and source. Filtering Wi-Fi/ Bluetooth ranging functions and GPS location data. Filtering GPS derived distances based on jump in calculated position or when GPS reports jump in position but phone accelerometer sensors do not show rapid acceleration. Specific models in different categories of radiation instruments (dosimeters, survey meters, personal radiation detectors, backpacks, nuclide identifiers, and mobile systems). **(Exhibit F)**



Google Beacon is a type of Bluetooth technology with proximity-based triggers. These triggers affect both the physical and digital world. Using Bluetooth low energy (BLE) hardware technology, beacons communicate with nearby smart devices like smartphones, tablets, etc. Different types of beacons that perform different tasks.

## **COUNT I**

### **(Infringement of the '619 Patent)**

76. Golden realleges; incorporates herein the allegations set forth in Paragraphs 1-75.

77. On information and belief, Google is jointly, directly, indirectly and/or under the 'doctrine of equivalents', infringing at least independent claim 11 of the '619 patent. The alleged infringing products are: Google Pixel 6a, 7, 7a, 7 Pro & Fold smartphones.

78. As set forth in Golden's preliminary infringement contentions, Google is making, using, offering for sale, selling and/or importing Plaintiff's CMDC device have at a minimum directly infringed the '619 patent and Google is thereby liable for infringement of the '619 patent pursuant to 35 U.S.C. § 271. Google have caused damage to Golden, which infringement and damage will continue unless and until Google is enjoined.

79. The alleged infringement of Golden identified in this Count has caused irreparable injury to Golden for which remedies at law are inadequate. Considering the balance of the hardships between the parties, a remedy in equity, such as a permanent injunction is warranted and such a remedy would be in the public interest.

## **COUNT II**

### **(Infringement of the '287 Patent)**

80. Golden realleges; incorporates herein the allegations set forth in Paragraphs 1-79.

81. On information and belief, Google is jointly, directly, indirectly and/or under the 'doctrine of equivalents', infringing at least independent claim 5 of the '287 patent. The alleged infringing products are: Google Pixel 6a, 7, 7a, 7 Pro & Fold smartphones.

82. As set forth in Golden's preliminary infringement contentions, Google is making, using, offering for sale, selling and/or importing Plaintiff's CMDC device have at a minimum

directly infringed the ‘287 patent and Google is thereby liable for infringement of the ‘287 patent pursuant to 35 U.S.C. § 271. Google have caused damage to Golden, which infringement and damage will continue unless and until Google is enjoined.

83. The alleged infringement of Golden identified in this Count has caused irreparable injury to Golden for which remedies at law are inadequate. Considering the balance of the hardships between the parties, a remedy in equity, such as a permanent injunction is warranted and such a remedy would be in the public interest.

### **COUNT III**

#### **(Infringement of the ‘439 Patent)**

84. Golden realleges; incorporates herein the allegations set forth in Paragraphs 1-83.

85. On information and belief, Google is jointly, directly, indirectly and/or under the ‘doctrine of equivalents’, infringing at least independent claims 19 and 23 of the ‘439 patent. The alleged infringing products are: Google Pixel 6a, 7, 7a, 7 Pro & Fold smartphones.

86. As set forth in Golden’s preliminary infringement contentions, Google is making, using, offering for sale, selling and/or importing Plaintiff’s CMDC device have at a minimum directly infringed the ‘439 patent and Google is thereby liable for infringement of the ‘439 patent pursuant to 35 U.S.C. § 271. Google have caused damage to Golden, which infringement and damage will continue unless and until Google is enjoined.

87. The alleged infringement of Google identified in this Count has caused irreparable injury to Golden for which remedies at law are inadequate. Considering the balance of the hardships between the parties, a remedy in equity, such as a permanent injunction is warranted and such a remedy would be in the public interest.

## COUNT IV

### (Infringement of the ‘189 Patent)

88. Golden realleges; incorporates herein the allegations set forth in Paragraphs 1-87.

89. On information and belief, Google is jointly, directly, indirectly and/or under the ‘doctrine of equivalents’, infringing claims 1 & 7 of the ‘189 patent. The alleged infringing products are: Google Pixel 6a, 7, 7a, 7 Pro & Fold smartphones.

90. As set forth in Golden’s preliminary infringement contentions that Google is making, using, offering for sale, selling and/or importing Plaintiff’s CMDC device have at a minimum directly infringed the ‘189 patent and Google is thereby liable for infringement of the ‘189 patent pursuant to 35 U.S.C. § 271. Google have caused damage to Golden, which infringement and damage will continue unless and until Google is enjoined.

91. The alleged infringement of Google identified in this Count has caused irreparable injury to Golden for which remedies at law are inadequate. Considering the balance of the hardships between the parties, a remedy in equity, such as a permanent injunction is warranted and such a remedy would be in the public interest.

## EXHIBITS OF CLAIM CHARTS AND PATENTS

**Exhibit G** is an element-by-element claim chart of Plaintiff’s alleged literal, infringement under the doctrine of equivalents, and contributory infringement claims.

**Exhibit H** is an element-by-element claim chart of Plaintiff’s alleged induced, contributory, and joint infringement claims.

**Exhibits I-L** are copies of Plaintiff’s United States Patent Nos. 10,984,619 (‘619), 10,163,287 (‘287 Patent), 9,589,439 (‘439 Patent), and 9,096,189 (‘189 Patent).

## **PRAYER FOR RELIEF**

Wherefore, Golden respectfully requests that this Court enter:

A. A judgment in favor of Golden that the defendant has infringed claims of the ‘619 Patent, the ‘287 Patent, the ‘439 Patent, and the ‘189 Patent as aforesaid;

B. A permanent injunction enjoining the defendant, its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, and all others acting in active concert or privity therewith from direct, indirect and/or joint infringement of the ‘619, ‘287, ‘439, and ‘189 patents as aforesaid pursuant to 35 U.S.C. § 283;

C. A judgment and order requiring the defendant to pay Golden its damages with pre- and post-judgment interest thereon pursuant to 35 U.S.C. § 284;

D. As set forth in Golden’s preliminary infringement contentions that the Defendant in this case is making, using, offering for sale, selling and/or importing the aforementioned alleged infringing devices that have at a minimum, directly infringed the ‘619, ‘287, ‘439, and ‘189 patents. The Defendant is thereby liable for infringement of the ‘619, ‘287, ‘439, and ‘189 patents pursuant to 35 U.S.C. § 271. The Defendant has caused damage to Golden, which infringement and damage will continue unless and until the Defendant is enjoined.

E. Any and all further relief to which the Court may deem Golden entitled.

## **DEMAND FOR JURY TRIAL**

Golden requests a trial by jury on all issues so triable by right pursuant to Fed. R. Civ. P.

38. A right guaranteed under the Seventh Amendment of the Constitution.

Sincerely,

A handwritten signature in black ink, reading "Larry Golden", written over a horizontal line.

Larry Golden, *Pro Se* Plaintiff

740 Woodruff Rd., #1102

Greenville, SC 29607

(H) 8642885605

(M) 8649927104

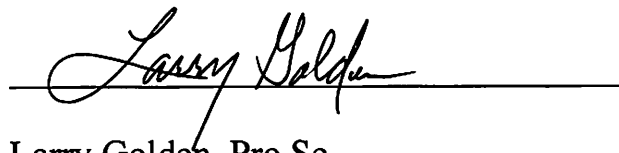
Email: atpg-tech@charter.net



**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that on this 21st day of August, 2023, a true and correct copy of the foregoing “Plaintiff’s Amended Complaint for Patent Infringement”, was served upon the following Defendant by priority “express” mail:

Matthew S. Warren  
WARREN LEX LLP  
2261 Market Street, No. 606  
San Francisco, California, 94114  
Phone: (415) 895-2940  
Fax: (415) 895-2964  
Email: 22-5246@cases.warrenlex.com

A handwritten signature in cursive script, reading "Larry Golden", is written over a horizontal line.

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Greenville, South Carolina 29607  
atpg-tech@charter.net  
864-288-5605